UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/006,608	11/30/2001	Michael Neal	DEM1P008	1143

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EXAMINER
HEWITT II, CALVIN L

ART UNIT	PAPER NUMBER
3621	

MAIL DATE	DELIVERY MODE
06/05/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/006,608	NEAL ET AL.
	Examiner	**Art Unit**	
	Calvin L. Hewitt II	3621	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *16 March 2007*.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1,3-7,9-14 and 16-28* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1,3-7,9-14 and 16-28* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date *11-9-06*.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____ .

Status of Claims

1.   Claims 1 and 3-7, 9-14 and 16-28 have been examined.

Response to Amendments/Arguments

2.   Initially, claims 1, 3-13 and 26 are directed to an apparatus. It has been

held that while features of an apparatus may be recited either structurally or

functionally, claims directed to an apparatus must be distinguished from the prior

art in terms of structure rather than function alone (MPEP 2114; *In re Swineheart*,

169 USPQ 226; *In re Schreiber*, 44 USPQ2d 1429 (Fed. Cir. 1997)).

Regarding, the selection of a subset of products, Hartman et al. teach

product subsets being determined by "experienced retailers" who have a "good

feel for the price sensitivity of items" in a product line ('425, column 5, lines 48-

64). Therefore, the prior art at least suggests Applicant's subset selection

method, as the automation of a known process is old and well known to one of

ordinary skill (*In re Venner*, 120 USPQ 192 (CCPA 1958); *In re Rundell*, 9 USPQ

220). More specifically, Applicant has amended, claim 1 for example, to include

the language of "and wherein the selected no more than N products has the

largest impact on optimization of prices of any subset of no more that N products

of the plurality of products". However, this limitation merely further describes "N"

and does not affect the steps of "storing", "creating" and "designating" as "N" is never used to optimize a price for a product.

Claims 26 and 27 are directed to subject matter that may or may not occur. For example, there are no guarantees that stores have closed, records are missing or that products have had a change in information state, hence these features cannot distinguish the claims from the prior art (MPEP, 2106, II, C; *In re Johnston*, 77 USPQ2d 1788 (CA FC 2006); Intel Corp. v. Int'l Trade Comm'n, 20 USPQ2d 1161 (Fed. Cir. 1991)). In addition, removing erroneous data from a database is old and well known, and would have been obvious to one of ordinary skill in order prevent inaccurate analysis using data from said database.

Claim Rejections - 35 USC § 101

3.   35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4.   Claims 1 and 3-7, 9-14 and 16-28 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1, 14, 21, 23 and 24 are directed to algorithm. For example, claims 1, 14, and 23 are directed to "optimizing prices" while "holding" initial prices constant. This merely describes a step in a calculation. Therefore, as the claimed algorithm has not been used to produce a useful, concrete and tangible result

(*AT&T Corp. v. Excel Communications, Inc.*, 50 USPQ2d 1447 (Fed. Cir.1999);

State Street Bank & Trust Co. v. Signature Financial Group Inc., 47 USPQ2d

1596 (Fed. Cir. 1998)) it is non-statutory. Claim 21, on the other hand recites,

"setting prices". However, it is unclear whether this is performed as part of the

calculation (e.g. a reiterative process, refining the model, testing the hypothesis)

or is a price database updated and these new prices are acted upon to produce a

useful concrete and tangible result. Claim 24 merely describes using a server to

perform a calculation.

Claims 3-7, 9-13, 16-20, and 25-28 are also rejected as each depends

from either claim 1 or 14.

Claim 1 is also rejected, as given its broadest reasonable interpretation, it

reads on storing non-functional descriptive material such as a program listing or

pseudo code on a floppy or optical disk (MPEP 2106.01). Claim 23 is also

rejected as it recites similar language.

Claims 3-7, 9-13, 26 and 28 are also rejected as each depends from claim

1.

Claim Rejections - 35 USC § 112

4.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly
claiming the subject matter which the applicant regards as his invention.

5.   Claims 1, 3-7, 9-13, 26, 27 and 28 are rejected under 35 U.S.C. 112,

second paragraph, as being indefinite for failing to particularly point out and

distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is directed to an apparatus. However, claim 1 lacks "structure".

Therefore, the scope of Applicant's claimed apparatus is unclear to one of

ordinary skill (*In re Zletz*,13 USPQ2d 1320 (Fed. Cir. 1989).

Claims 3-7, 9-13, 26 and 28 are also rejected as each depends from claim

1.

The terms "obvious" and "unusual" in claims 26 and 27 are relative terms

which renders the claims indefinite. The terms "obvious" and "unusual" are not

defined by the claim, the specification does not provide a standard for

ascertaining the requisite degree, and one of ordinary skill in the art would not be

reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 103

6.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for

all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art.to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

7.   Claims 1, 3-7, 9-13, 26 and 28 are rejected under 35 U.S.C. 103(a) as

being unpatentable over Ouimet et al., U.S. Patent No. 6,094,641.

As per claims 1, 3-7, 9-13, 26 and 28, Ouimet et al. teach an apparatus

comprising a computer readable media that can be used for calculating a

preferred set of prices for a plurality products or a subset of said plurality (figure

2).

8.   Claims 14 and 16-27 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Ouimet et al., U.S. Patent No. 6,094,641 in view of Hartman et

al., U.S. Patent No. 5,987,425 and Delurgio et al., U.S. Patent No. 6,553,352.

As per claims 14 and 16-27, Ouimet et al. teach a computer implemented

method for computing a preferred set of prices comprising the storing of initial

prices of a plurality of products (column 3, lines 1-13), creating a demand model

for generating said prices (figures 3-4B; column 3, lines 1-13), displaying

optimized prices and setting store prices according to the displayed optimized

price (column 1, lines 65-67; column 2, lines 12-17). Ouimet et al. also teach that

an advantage of their system is that any demand model can be used (column 1,

lines 59-62) hence, it would have been to one of ordinary skill to use a model

derived from Bayesian statistics. Ouimet et al. do not explicitly recite dividing

products into subsets. Hartman et al. teach deriving optimal prices for a plurality

of products by dividing subsets according to department and price sensitivity

(abstract; figure 5; column/line 2/57-3/49; column/line 4/35-5/25). Regarding, the selection of a subset of products, Hartman et al. teach product subsets being determined by "experienced retailers" who have a "good feel for the price sensitivity of items" in a product line ('425, column 5, lines 48-64). It has been held that in order for a new combination of old elements to be patentable, the elements must cooperate in such manner as to produce a new, unobvious, and unexpected result (*In re Venner*, 120 USPQ 192 (CCPA 1958); *In re Smith*, 73 USPQ 394). It has also been held that it is not 'invention' to broadly provide a mechanical or automatic means to replace manual activity which has accomplished the same result (*In re Venner*, 120 USPQ 192 (CCPA 1958); *In re Rundell*, 9 USPQ 220). Therefore, it would have been obvious to one of ordinary skill to automate the subset selection process of Hartman et al. using a well known computer algorithm such as integer programming (IP) (Note it is inherent to the solution of an IP problem to "relax" the integer constraint in order to convert the IP problem to a more solvable LP or linear programming problem). However, neither Ouimet et al. nor Hartman et al. explicitly recite sending sales data to a server. Delurgio et al. teach sending product sales data to a server in order to receive optimized prices for said products or a subset of said products (abstract; figures 2, 11 and 12; column 7, lines 14-60). Ouimet et al. does not specifically recite demand models based on Bayesian statistics. On the other

hand, Ouimet et al. teach that an advantage of their system is that any demand model can be used (column 1, lines 59-62). Delurgio et al. also teach demand models derived using Bayesian statistics (column 8, lines 10-25). Therefore, it would have been obvious to one of ordinary skill to combine the teachings of Ouimet et al., Hartman et al. and Delurgio et al. in order to provide a grocery chain (e.g. Giant, Safeway) a method for managing prices at multiple stores ('352, column 7, lines 14-43) and better optimize prices by grouping products according to price sensitivity ('425, column/line 2/55-3/26).

Conclusion

9.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Barrett et al. disclose removing duplicate records from a database
- Shurling et al. disclose removing old and inaccurate data from a database
- Streit et al. disclose removing erroneous data from a database

10.   Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Calvin Loyd Hewitt II whose telephone
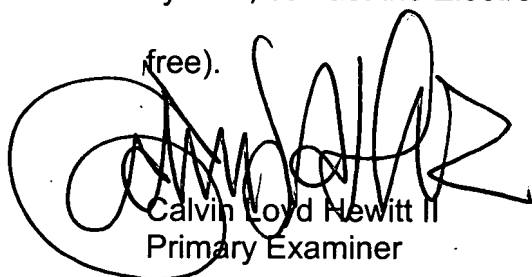
number is (571) 272-6709. The Examiner can normally be reached on Monday-Friday from 8:30 AM-5:00 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Andrew Fischer, can be reached at (571) 272-6779.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see **http://pair-direct.uspto.gov**. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Calvin Loyd Hewitt II
Primary Examiner

May 21, 2007